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STIC Search Report
EIC 2800

STIC Database Tracking Number: 128626

TO: William Dowling Location: JEF- 9C73 Art Unit : 2851 Friday, July 30, 2004 Case Serial Number: 09/362623	From: Darcy Bates Location: EIC 2800 JEF- 4B68 Phone: 571-272-2540 darcy.bates@uspto.gov

Search Notes

Re: 09/362,623 US 5,651,599

Attached are search results.

No U. S. litigation was found in searches of Lexis-Nexis and Questel-Orbit databases.

If more searching or explanation is needed, please let me know.

Thanks,
Darcy Bates

sira
Search and Information Resources Administration

Day : Friday
Date: 7/30/2004
Time: 09:22:50

PALM INTRANET

Application Number Information

Application Number: **09/362623** Assignments
Filing Date: **07/28/1999**
Effective Date: **07/28/1999**
Application Received: **07/28/1999**
Patent Number:
Issue Date: **00/00/0000**
Date of Abandonment: **00/00/0000**
Attorney Docket Number: **103614.99**
Status: **90 /ALLOWED -- NOTICE OF ALLOWANCE NOT YET MAILED**
Confirmation Number: **7088**
Title of Invention: **PROJECTION TYPE LIQUID CRYSTAL PROJECTOR**

Examiner Number: **68272 / DOWLING, WILLIAM**
Group Art Unit: **2851**
Class/Subclass: **353/061.000**
Lost Case: **NO**
Interference Number:
Unmatched Petition: **NO**
L&R Code: Secrecy Code:**1**
Third Level Review: **NO**
Oral Hearing: **NO**

Secrecy Order: **NO**
Status Date: **05/22/2002**

Bar Code	PALM Location	Location Date	Charge to Loc	Charge to Name	Employee Name	Location
09362623	28U1	05/05/2004	28X1	DOWLING, WILLIAM	LABALLE,CLAYTON	JEF/08/D 51

Appln Info: Contents | Petition Info | Atty/Agent Info | Continuity Data | Foreign Data | Inventors | Address | Fees | Post Info | Pre Grant Pub

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Day : Friday
Date: 7/30/2004
Time: 09:23:03

PALM INTRANET

Continuity Information for 09/362623

Parent Data
09362623
is a reissue of 08394308
is a division of 07938261

Child Data
No Child Data

Appln Info | Contents | Petition Info | Atty/Agent Info | **Continuity Data** | Foreign Data | Inventors | Address | Fees | Post Info | Pre Grant Pub

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Day : Friday
Date: 7/30/2004
Time: 09:23:08

PALM INTRANET

Application Number Information

Application Number: **08/394308** Order This File Assignments
Examiner Number: **68272 / DOWLING, WILLIAM**
Filing Date: **02/24/1995**
Group Art Unit: **3108**
Effective Date: **02/24/1995**
Class/Subclass: **353/061.000**
Application Received: **02/24/1995**
Lost Case: **NO**
Patent Number: **5651599**
Interference Number:
Issue Date: **07/29/1997**
Unmatched Petition: **NO**
Date of Abandonment: **00/00/0000**
L&R Code: Secrecy Code:**1**
Attorney Docket Number: **U-10069-8**
Third Level Review: **NO**
Secrecy Order: **NO**
Status: **150 /PATENTED CASE**
Status Date: **07/17/1997**
Confirmation Number: **2492**
Oral Hearing: **NO**
Title of Invention: **PROJECTION TYPE LIQUID CRYSTAL PROJECTOR**

Bar Code	PALM Location	Location Date	Charge to Loc	Charge to Name	Employee Name	Location
08394308	9200	05/28/2004	No Charge to Location	No Charge to Name	JACQUES,PAUL	

Appln Info: Contents | Petition Info | Atty/Agent Info | Continuity Data | Foreign Data | Inventors | Address | Fees | Post Info | Pre Grant Pub

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Day : Friday
Date: 7/30/2004
Time: 09:23:14

PALM INTRANET

Continuity Information for 08/394308

Parent Data
08394308
is a division of 07938261

Child Data
08795117 **is a continuation of** 08394308
09362623 **is a reissue of** 08394308

Appln Info | Contents | Petition Info | Atty/Agent Info | **Continuity Data** | Foreign Data | Inventors | Address | Fees | Post Info | Pre Grant Pub

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Attorney Docket # [] Search
Bar Code # [] Search

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Day : Friday
Date: 7/30/2004
Time: 09:23:19

PALM INTRANET

Application Number Information

Application Number: **07/938261** Order This File Assignments
Examiner Number: **68272 / DOWLING, WILLIAM**
Filing Date: **10/21/1992**
Group Art Unit: **2406**
Effective Date: **10/21/1992**
Class/Subclass: **353/122.000**
Application Received: **10/21/1992**
Lost Case: **YES**
Patent Number: **5418586**
Interference Number:
Issue Date: **05/23/1995**
Unmatched Petition: **NO**
Date of Abandonment: **00/00/0000**
L&R Code: Secrecy Code:**1**
Attorney Docket Number: **U-8969-8**
Third Level Review: **NO**
Secrecy Order: **NO**
Status: **150 /PATENTED CASE**
Status Date: **05/12/1995**
Confirmation Number: **4897**
Oral Hearing: **NO**
Title of Invention: **PROJECTION TYPE LIQUID CRYSTAL PROJECTOR**

Bar Code	PALM Location	Location Date	Charge to Loc	Charge to Name	Employee Name	Location
07938261	9200	07/02/1999	No Charge to Location	No Charge to Name	LOE CONV DR1995C	

Appln Info: Contents | Petition Info | Atty/Agent Info | Continuity Data | Foreign Data | Inventors | Address | Fees | Post Info | Pre Grant Pub

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Attorney Docket # [] Search
Bar Code # [] Search

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Day : Friday
Date: 7/30/2004
Time: 09:23:26

PALM INTRANET

Continuity Information for 07/938261

Parent Data

No Parent Data

Child Data

08394308 **is a division of** 07938261
08795117 **is a continuation of** 08394308
09362623 **is a reissue of** 08394308

Appln Info | Contents | Petition Info | Atty/Agent Info | **Continuity Data** | Foreign Data | Inventors | Address | Fees | Post Info | Pre Grant Pub

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Back to PALM | ASSIGNMENT | OASIS | Home page

Day : Friday
Date: 7/30/2004
Time: 09:23:31

PALM INTRANET

Application Number Information

Application Number: **08/795117** Order This File Assignments
Examiner Number: **68272 / DOWLING, WILLIAM**
Filing Date: **02/06/1997**
Group Art Unit: **2851**
Effective Date: **02/06/1997**
Class/Subclass: **353/031.000**
Application Received: **02/06/1997**
Lost Case: **NO**
Patent Number: **5988818**
Interference Number:
Issue Date: **11/23/1999**
Unmatched Petition: **NO**
Date of Abandonment: **00/00/0000**
L&R Code: Secrecy Code:**1**
Attorney Docket Number: **U-011104-7**
Third Level Review: **NO**
Secrecy Order: **NO**
Status: **150 /PATENTED CASE**
Status Date: **11/15/1999**
Confirmation Number: **7434**
Oral Hearing: **NO**
Title of Invention: **PROJECTION TYPE LIQUID CRYSTAL PROJECTOR**

Bar Code	PALM Location	Location Date	Charge to Loc	Charge to Name	Employee Name	Location
08795117	9200	11/23/1999	No Charge to Location	No Charge to Name	LOE CONV DR1995U	

Appln Info: Contents | Petition Info | Atty/Agent Info | Continuity Data | Foreign Data | Inventors | Address | Fees | Post Info | Pre Grant Pub

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PCT / [] / [] Search **or PG PUBS #** [] Search
Attorney Docket # [] Search
Bar Code # [] Search

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Day : Friday
Date: 7/30/2004
Time: 09:23:37

PALM INTRANET

Continuity Information for 08/795117

Parent Data
08795117
is a continuation of 08394308
is a division of 07938261
is a national stage entry of PCT/JP92/00183 International Filing Date: **02/21/1992**

Child Data
No Child Data

Appln Info | Contents | Petition Info | Atty/Agent Info | **Continuity Data** | Foreign Data | Inventors | Address | Fees | Post Info | Pre Grant Pub

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PCT / [] / [] Search **or PG PUBS #** [] Search
Attorney Docket # [] Search
Bar Code # [] Search

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Litigation involving patent 5,651,599

Click on the docket number to view the docket.
Click on the above patent number to view the patent.

Docket	Case Heading	Date Filed	Date Retrvd

There are no cases involving this patent number.

Source: Legal > Area of Law - By Topic > Patent Law > Patents > U.S. Patents > Utility Patents
Terms: patno=5651599 (Edit Search)

394308 (08) 5651599 July 29, 1997

UNITED STATES PATENT AND TRADEMARK OFFICE GRANTED PATENT

5651599

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Link to Claims Section

July 29, 1997

Projection type liquid crystal projector

REISSUE: Reissue Application filed Jul. 28, 1999 (O.G. Sep. 14, 1999) Ex. Gp.: 2851; Re. S.N. 09/362,623, (O.G. September 14, 1999)

INVENTOR: Fujimori, Motoyuki, Suwa, JP; Hashizume, Toshiaki, Suwa, JP; Iguchi, Kenji, Suwa, JP; Sakagami, Keisuke, Suwa, JP; Okumura, Kiichi, Suwa, JP

APPL-NO: 394308 (08)

FILED-DATE: February 24, 1995

GRANTED-DATE: July 29, 1997

PRIORITY: February 22, 1991 - 3-28430, Japan (JP); March 22, 1991 - 3-59137, Japan (JP); June 10, 1991 - 3-137633, Japan (JP); June 27, 1991 - 3-49295, Japan (JP); June 27, 1991 - 3-156408, Japan (JP); June 27, 1991 - 3-156422, Japan (JP)

ASSIGNEE-AT-ISSUE: Seiko Epson Corporation, Tokyo-To, JP

LEGAL-REP: Ladas & Parry

Enter Search Terms

Terms and Connectors Natural Language

patno=5651599

Search

Use connectors to show relation of terms (cat **or** feline, jane **w/3** doe) more...

Suggest Words and Concepts for Entered Terms

Restrict Search Using Document Segments

Optional: Restrict by Date

No Date Restrictions From To

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Query/Command : file pluspat

Selected file: PLUSPAT

Search statement 1

Query/Command : us5651599/pn

**** SS 3: Results 1**

Search statement 4

Query/Command : prt fu legalall max

1 / 1 PLUSPAT - ©QUESTEL-ORBIT - image
PN - US5651599 A 19970729 [US5651599]
TI - (A) Projection type liquid crystal projector
PA - (A) SEIKO EPSON CORP (JP)
PA0 - Seiko Epson Corporation, Tokyo-To [JP]
IN - (A) FUJIMORI MOTOYUKI (JP); HASHIZUME TOSHIAKI (JP); IGUCHI KENJI (JP); SAKAGAMI KEISUKE (JP); OKUMURA KIICHI (JP)
AP - US39430895 19950224 [1995US-0394308]
FD - Divsn of US938261 19921021 [1992US-0938261]
Division of: US5418586
PR - JP2843091 19910222 [1991JP-0028430]
JP4929591U 19910627 [1991JP-U049295]
JP5913791 19910322 [1991JP-0059137]
JP13763391 19910610 [1991JP-0137633]
JP15640891 19910627 [1991JP-0156408]
JP15642291 19910627 [1991JP-0156422]
US39430895 19950224 [1995US-0394308]
US93826192 19921021 [1992US-0938261]
IC - (A) G03B-021/14
EC - H04N-009/31V
PCL - ORIGINAL (O) : 353061000; CROSS-REFERENCE (X) : 353058000 353119000
DT - Basic
CT - US4787737; US4843528; US5092671; US5200857; US5231431; US5237399; US5283599; US5287132; US5313234; JP6312301; JP5288337; JP61-14034; JP2314051; JP287452; JP3-207777; JP4040509; JP4040605; JP4310913
STG - (A) United States patent
AB - A projector for separating white light into three primary colors, forming images with liquid crystal light valves, mixing these images, and projecting an enlarged picture of the mixed images with a projection lens. The projector includes an optical unit having a light source, a plurality of dichroic mirrors for separating the white light into blue, green, and red beams, respective liquid crystal light valves forming images of the blue, green, and red colors. The optical unit has a chassis with a rigid center portion at which one of the liquid crystal light valves is mounted, the other two light valves being mounted symmetrically with respect thereto. An adjustment mechanism is provided for matching pixels of the second and third color valves with those of the first color valve. The red color liquid crystal light valve is disposed midway between the blue and green color liquid crystal light valves and a cooling fan is disposed below the red color liquid crystal light valve.

1 / 1 LGST - ©EPO
PN - US5651599 A 19970729 [US5651599]
AP - US39430895 19950224 [1995US-0394308]
ACT - 19990914 US/RF-A
REISSUE APPLICATION FILED
EFFECTIVE DATE: 19990728
UP - 2003-22

1 / 1 CRXX - ©CLAIMS/RRX
AN - 2865908
PN - 5,651,599 A 19970729 [US5651599]
PA - Seiko Epson Corp JP
PT - M (Mechanical)
ACT - 19990728 REISSUE REQUESTED
Issue Date of O.G.: 19990914
Reissue Request Number: 09/362623
Examination Group responsible for Reissue process: 2851

UP - 1999-36
UACT- 1999-09-14

Search statement 4

Query/Command : fam us5651599/pn

1 Patent Groups
**** SS 4: Results 13**

Search statement 5

Query/Command : famstate nonstop

1 / 13 PLUSPAT - ©QUESTEL-ORBIT - image
PN - EP0526653 A1 19930210 [EP-526653]
STG - (A1) Public. Of applic. With search report
TI - (A1) PROJECTION-TYPE LIQUID CRYSTALLINE PROJECTOR.
OTI - (A1) PROJECTEUR A CRISTAUX LIQUIDES.
(A1) FLüSSIGKRISTALL PROJEKTOR.
PA - (A1) SEIKO EPSON CORP (JP)
IN - (A1) FUJIMORI MOTOYUKI (JP); HASHIZUME TOSHIAKI (JP); IGUCHI KENJI (JP); SAKAGAMI KEISUKE (US); OKUMURA KIICHI (US)
IC - (A1) G03B-033/12
LA - ENGLISH (ENG)
AP - EP92905105 19920221 [1992EP-0905105]
PR - JP2843091 19910222 [1991JP-0028430]
JP4929591U 19910627 [1991JP-U049295]
JP5913791 19910322 [1991JP-0059137]
JP13763391 19910610 [1991JP-0137633]
JP15640891 19910627 [1991JP-0156408]
JP15642291 19910627 [1991JP-0156422]
EC - H04N-009/31V
DS - DE FR GB
DT - Basic (replaces original non EP official language basic.)

1 / 1 *LEGALI - ©EPO*
PN - EP0526653 A1 19930210 [EP-526653]
AP - EP92905105 19920221 [1992EP-0905105]
ACTE- 19930210 EP/AK-A [+]
DESIGNATED CONTRACTING STATES:
DE FR GB

19930210 EP/17P-A [+]
REQUEST FOR EXAMINATION FILED
EFFECTIVE DATE: 19921023

19930616 EP/18W-A [-]
WITHDRAWN
WITHDRAWAL DATE: 19930422

19930728 EP/R18W-A [-]
WITHDRAWAL (CORRECTION)
EFFECTIVE DATE: 19930402
UP - 2003-22

2 / 13 *PLUSPAT - ©QUESTEL-ORBIT - image*
PN - JP2002162615 A 20020607 [JP2002162615]
STG - (A) Doc. Laid open to publ. Inspec.
TI - (A) PROJECTOR
PA - (A) SEIKO EPSON CORP
IN - (A) FUJIMORI MOTOYUKI; IGUCHI KENJI; OKUMURA KIICHI; HASHIZUME TOSHIAKI; SAKAGAMI KEISUKE
IC - (A) G02F-001/13 G02F-001/1333 G02F-001/1335 G03B-021/00 G03B-021/14 G03B-033/12 H04N-009/31
AP - JP2001270836 20010906 [2001JP-0270836]
PR - JP2001270836 20010906 [2001JP-0270836]
JP2843091 19910222 [1991JP-0028430]
JP5913791 19910322 [1991JP-0059137]
JP13763391 19910610 [1991JP-0137633]
JP15640891 19910627 [1991JP-0156408]
JP15642291 19910627 [1991JP-0156422]
JP4929591U 19910627 [1991JP-U049295]
UP - 2002-28

3 / 13 *PLUSPAT - ©QUESTEL-ORBIT - image*
PN - JP11344767 A 19991214 [JP11344767]
STG - (A) Doc. Laid open to publ. Inspec.
TI - (A) PROJECTOR
PA - (A) SEIKO EPSON CORP
PA0 - (A) SEIKO EPSON CORP
IN - (A) FUJIMORI MOTOYUKI; IGUCHI KENJI; OKUMURA KIICHI; HASHIZUME TOSHIAKI; SAKAGAMI KEISUKE
IC - (A) G02B-027/18 G02F-001/13 G03B-021/00 G09F-009/00 H04N-005/74 H04N-009/31
PN2 - JP3223905 B2 20011029 [JP3223905]
STG2- (B2) Grant. Pat. With A from 2500000 on
IC2 - (B2) G02B-027/18 G02F-001/13 G03B-021/00 G09F-009/00 H04N-005/74 H04N-009/31
AP - JP4058699 19990218 [1999JP-0040586]
PR - JP4058699 19990218 [1999JP-0040586]
JP2843091 19910222 [1991JP-0028430]
JP5913791 19910322 [1991JP-0059137]

JP13763391 19910610 [1991JP-0137633]
JP15640891 19910627 [1991JP-0156408]
JP15642291 19910627 [1991JP-0156422]
JP4929591U 19910627 [1991JP-U049295]

4 / 13 PLUSPAT - ©QUESTEL-ORBIT - image
PN - JP2000002932 A 20000107 [JP2000002932]
STG - (A) Doc. Laid open to publ. Inspec.
TI - (A) PROJECTOR
PA - (A) SEIKO EPSON CORP
PA0 - (A) SEIKO EPSON CORP
IN - (A) FUJIMORI MOTOYUKI; HASHIZUME TOSHIAKI; IGUCHI KENJI; SAKAGAMI KEISUKE; OKUMURA KIICHI
IC - (A) G02B-027/18 G02F-001/13 G03B-021/00 G09F-009/00 H04N-005/74 H04N-009/31
AP - JP4061799 19990218 [1999JP-0040617]
PR - JP4061799 19990218 [1999JP-0040617]
JP2843091 19910222 [1991JP-0028430]
JP5913791 19910322 [1991JP-0059137]
JP13763391 19910610 [1991JP-0137633]
JP15640891 19910627 [1991JP-0156408]
JP15642291 19910627 [1991JP-0156422]
JP4929591U 19910627 [1991JP-U049295]
UP - 2000-10

5 / 13 PLUSPAT - ©QUESTEL-ORBIT - image
PN - JP11352587 A 19991224 [JP11352587]
STG - (A) Doc. Laid open to publ. Inspec.
TI - (A) PROJECTOR
PA - (A) SEIKO EPSON CORP
PA0 - (A) SEIKO EPSON CORP
IN - (A) FUJIMORI MOTOYUKI; IGUCHI KENJI; OKUMURA KIICHI; HASHIZUME TOSHIAKI; SAKAGAMI KEISUKE
IC - (A) G02B-027/18 G02F-001/13 G03B-021/00 G09F-009/00 H04N-005/74 H04N-009/31
PN2 - JP3223906 B2 20011029 [JP3223906]
STG2- (B2) Grant. Pat. With A from 2500000 on
IC2 - (B2) G02B-027/18 G02F-001/13 G03B-021/00 G09F-009/00 H04N-005/74 H04N-009/31
AP - JP4066199 19990218 [1999JP-0040661]
PR - JP4066199 19990218 [1999JP-0040661]
JP2843091 19910222 [1991JP-0028430]
JP5913791 19910322 [1991JP-0059137]
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JP15640891 19910627 [1991JP-0156408]
JP15642291 19910627 [1991JP-0156422]
JP4929591U 19910627 [1991JP-U049295]

6 / 13 PLUSPAT - ©QUESTEL-ORBIT
PN - JP5004149 U 19930122 [JP05004149U]
STG - (U) Unexam. Utility model appl.
IC - (U) G03B-021/00 G03B-021/64
AP - JP4929591U 19910627 [1991JP-U049295]
PR - JP4929591U 19910627 [1991JP-U049295]
UP - 2002-50

7 / 13 PLUSPAT - ©QUESTEL-ORBIT
PN - JP3273372 B2 20020408 [JP3273372]
STG - (B2) Grant. Pat. With A from 2500000 on
IC - (B2) G03B-021/00 G03B-033/12
AP - JP50462392T 19920221 [1992JP-0504623]
PR - JP2843091 19910222 [1991JP-0028430]
JP5913791 19910322 [1991JP-0059137]
JP13763391 19910610 [1991JP-0137633]
JP15640891 19910627 [1991JP-0156408]
JP15642291 19910627 [1991JP-0156422]
JP4929591U 19910627 [1991JP-U049295]
WOJP9200183 19920221 [1992WO-JP00183]

8 / 13 PLUSPAT - ©QUESTEL-ORBIT
PN - KR225445 B1 19991015 [KR-225445]
STG - (B1) Examined pat. App. (2nd pub.) B5
TI - (B1) PROJECTION-TYPE LIQUID CRYSTALLINE PROJECTOR
PA - (B1) SEIKO EPSON CORP (JP)
IN - (B1) FUJIMORIMO TOYUKI (JP); HASHIZUME TOSHIAKI (JP); IGUC
HIKENJI (JP); SAKAGA MIKEISUKE (JP); OKUMU RAKIICHI (JP)
IC - (B1) G03B-033/12
AP - KR9272616D 19921022 [1992KR-0072616]
PR - JP2843091 19910222 [1991JP-0028430]
JP5913791 19910322 [1991JP-0059137]
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JP15640891 19910627 [1991JP-0156408]
JP15642291 19910627 [1991JP-0156422]
JP4929591 19910627 [1991JP-0049295]
WOJP9200183 19920221 [1992WO-JP00183]
UP - 2000-35

9 / 13 PLUSPAT - ©QUESTEL-ORBIT
PN - KR257086 B1 20000515 [KR-257086]
STG - (B1) Examined pat. App. (2nd pub.) B5
TI - (B1) PROJECTION TYPE LIQUIDCRYSTAL PROJECTOR
PA - (B1) SEIKO EPSON CORP (JP)
IN - (B1) FUJIMORI MOTOYUKI (JP); IGUCHI KENJI (JP); OKUMURA KIICHI
(JP); HASHIZUME TOSHIAKI (JP); SAKAGAMI KEISUKE (JP)
IC - (B1) G03B-033/12
AP - KR99702637T 19990326 [1999KR-0702637]
PR - JP2843091 19910222 [1991JP-0028430]
JP5913791 19910322 [1991JP-0059137]
JP13763391 19910610 [1991JP-0137633]
JP15640891 19910627 [1991JP-0156408]
JP15642291 19910627 [1991JP-0156422]
JP4929591U 19910627 [1991JP-U049295]
WOJP9200183 19920221 [1992WO-JP00183]
UP - 2001-04

10 / 13 PLUSPAT - ©QUESTEL-ORBIT - image
PN - US5651599 A 19970729 [US5651599]
STG - (A) United States patent
TI - (A) Projection type liquid crystal projector
PA - (A) SEIKO EPSON CORP (JP)
PA0 - Seiko Epson Corporation, Tokyo-To [JP]
IN - (A) FUJIMORI MOTOYUKI (JP); HASHIZUME TOSHIAKI (JP); IGUCHI

KENJI (JP); SAKAGAMI KEISUKE (JP); OKUMURA KIICHI (JP)
IC - (A) G03B-021/14
AP - US39430895 19950224 [1995US-0394308]
PR - JP2843091 19910222 [1991JP-0028430]
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JP5913791 19910322 [1991JP-0059137]
JP13763391 19910610 [1991JP-0137633]
JP15640891 19910627 [1991JP-0156408]
JP15642291 19910627 [1991JP-0156422]
US39430895 19950224 [1995US-0394308]
US93826192 19921021 [1992US-0938261]
EC - H04N-009/31V
PCL - ORIGINAL (O) : 353061000; CROSS-REFERENCE (X) : 353058000
353119000
DT - Basic

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PN - US5651599 A 19970729 [US5651599]
AP - US39430895 19950224 [1995US-0394308]
ACTE- 19990914 US/RF-A
REISSUE APPLICATION FILED
EFFECTIVE DATE: 19990728
UP - 2003-22

11 / 13 PLUSPAT - ©QUESTEL-ORBIT - image
PN - US5988818 A 19991123 [US5988818]
STG - (A) United States patent
TI - (A) Projection type liquid crystal projector
PA - (A) SEIKO EPSON CORP (JP)
PA0 - Seiko Epson Corporation, Tokyo [JP]
IN - (A) FUJIMORI MOTOYUKI (JP); IGUCHI KENJI (JP); OKUMURA KIICHI (JP); HASHIZUME TOSHIAKI (JP); SAKAGAMI KEISUKE (JP)
IC - (A) G03B-021/14
AP - US79511797 19970206 [1997US-0795117]
PR - US79511797 19970206 [1997US-0795117]
JP2843091 19910222 [1991JP-0028430]
JP5913791 19910322 [1991JP-0059137]
JP13763391 19910610 [1991JP-0137633]
JP4929591U 19910627 [1991JP-U049295]
JP15640891 19910627 [1991JP-0156408]
JP15642291 19910627 [1991JP-0156422]
US39430895 19950224 [1995US-0394308]
EC - H04N-009/31V
PCL - ORIGINAL (O) : 353119000; CROSS-REFERENCE (X) : 349058000
353101000
DT - Basic

12 / 13 PLUSPAT - ©QUESTEL-ORBIT
PN - US5418586 A 19950523 [US5418586]
STG - (A) United States patent
TI - (A) Projection type liquid crystal projector
PA - (A) SEIKO EPSON CORP (JP)
PA0 - Seiko Epson Corporation, Tokyo [JP]
IN - (A) FUJIMORI MOTOYUKI (JP); HASHIZUME TOSHIAKI (JP); IGUCHI KENJI (JP); SAKAGAMI KEISUKE (JP); OKUMURA KIICHI (JP)
IC - (A) G03B-021/00
AP - US93826192 19921021 [1992US-0938261]

PR - JP2843091 19910222 [1991JP-0028430]
JP4929591U 19910627 [1991JP-U049295]
JP5913791 19910322 [1991JP-0059137]
WOJP9200183 19920221 [1992WO-JP00183]
JP13763391 19910610 [1991JP-0137633]
JP15640891 19910627 [1991JP-0156408]
JP15642291 19910627 [1991JP-0156422]
EC - H04N-009/31V
PCL - ORIGINAL (O) : 353122000; CROSS-REFERENCE (X) : 353034000 353058000
DT - Corresponding document

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PN - US5418586 A 19950523 [US5418586]
AP - US93826192 19921021 [1992US-0938261]
ACTE- 19930524 US/AS02-A
ASSIGNMENT OF ASSIGNOR'S INTEREST
OWNER: SEIKO EPSON CORPORTATION 4-1, NISHI-SHINJUKU 2-CHO;
EFFECTIVE DATE: 19921013

19930524 US/AS02-A
ASSIGNMENT OF ASSIGNOR'S INTEREST
OWNER: FUJIMORI, MOTOYUKI; EFFECTIVE DATE: 19921013

19930524 US/AS02-A
ASSIGNMENT OF ASSIGNOR'S INTEREST
OWNER: HASHIZUME, TOSHIAKI; EFFECTIVE DATE: 19921013

19930524 US/AS02-A
ASSIGNMENT OF ASSIGNOR'S INTEREST
OWNER: IGUCHI, KENJI; EFFECTIVE DATE: 19921013

19930524 US/AS02-A
ASSIGNMENT OF ASSIGNOR'S INTEREST
OWNER: SAKAGAMI, KEISUKE; EFFECTIVE DATE: 19921013

19930524 US/AS02-A
ASSIGNMENT OF ASSIGNOR'S INTEREST
OWNER: O; EFFECTIVE DATE: 19921013
UP - 2003-22

13 / 13 PLUSPAT - ©QUESTEL-ORBIT - image
PN - WO9215041 A1 19920903 [WO9215041]
STG - (A1) Publ. Of int. Appl. With int. Search rep
TI - (A1) PROJECTION-TYPE LIQUID CRYSTALLINE PROJECTOR
PA - (A1) SEIKO EPSON CORP (JP)
PA0 - SEIKO EPSON CORPORATION; 4-1, Nishi-Shinjuku 2-chome Shinjuku-ku Tokyo 160 (JP) (except US)
FUJIMORI, Motoyuki; Seiko Epson Corporation 3-5, Yamato 3-chome Suwa-chi Nagano 392 (JP) (only US)
HASHIZUME, Toshiaki; Seiko Epson Corporation 3-5, Yamato 3-chome Suwa-shi Nagano 392 (JP) (only US)
IGUCHI, Kenji; Seiko Epson Corporation 3-5, Yamato 3-chome Suwa-shi Nagano 392 (JP) (only US)
SAKAGAMI, Keisuke; Seiko Epson Corporation 3-5, Yamato 3-chome Suwa-shi Nagano 392 (US) (only US)
OKUMURA, Kiichi; Seiko Epson Corporation 3-5, Yamato 3-chome Suwa-shi Nagano 392 (US) (only US)
IN - (A1) FUJIMORI MOTOYUKI (JP); HASHIZUME TOSHIAKI (JP); IGUCHI

KENJI (JP); SAKAGAMI KEISUKE (US); OKUMURA KIICHI (US)
IC - (A1) G03B-033/12
LA - JAPANESE (JPN)
AP - WOJP9200183 19920221 [1992WO-JP00183]
PR - JP2843091 19910222 [1991JP-0028430]
JP4929591U 19910627 [1991JP-U049295]
JP5913791 19910322 [1991JP-0059137]
JP13763391 19910610 [1991JP-0137633]
JP15640891 19910627 [1991JP-0156408]
JP15642291 19910627 [1991JP-0156422]
EC - H04N-009/31V
DS - AT (EP); BE (EP); CH (EP); DE (EP); DK (EP); ES (EP); FR (EP); GB (EP); GR (EP); IT (EP); JP; KR; LU (EP); MC (EP); NL (EP); SE (EP); US
DT - Basic

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PN - WO9215041 A1 19920903 [WO9215041]
AP - WOJP9200183 19920221 [1992WO-JP00183]
ACTE- 19920903 WO/AK [+]
DESIGNATED STATES CITED IN A PUBLISHED APPLICATION WITH SEARCH REPORT
JP KR US

19920903 WO/AL [+]
DESIGNATED COUNTRIES FOR REGIONAL PATENTS CITED IN A PUBLISHED APPLICATION WITH SEARCH REPORT
AT BE CH DE DK ES FR GB GR IT LU MC NL SE

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ENTRY INTO THE NATIONAL PHASE IN:
US 1997 795117A 19970206 [1997US-0795117]
UP - 2003-22

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